IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of: Vandaele

Serial No.: 10/589,203

Confirmation No.: 6656

Filed: May 11, 2007

For: Transfer Vessel between Flash Tank

and Purge Column

Atty. Dkt. No.: F-913

Group Art Unit: 1796

Cust. No.: 25264

Examiner: Boykin

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

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2/23/2009

Signature

RESPONSE TO OFFICE ACTION DATED JANUARY 16, 2009

In response to the Office Action dated January 16, 2009, having a shortened statutory period for response set to expire on April 16, 2009, Applicants respectfully request allowance of the claims based on the following.

IN THE CLAIMS:

The pending claims are set forth below and have been amended and/or cancelled, without prejudice, where noted:

1-33. (Cancelled)

34. (Currently Amended) A method for the recovery of a slurry of polymer particles from a polymerization reactor comprising:

recovering a slurry comprising polymer particles suspended in a liquid diluent from a loop reactor through a settling leg via a discharge valve:

providing a slurry comprising polymer particles suspended in a liquid diluent; passing introducing the slurry from the loop reactor to into a flash vessel;

reducing a pressure of the slurry from a first pressure to a second pressure within the flash vessel to vaporize the liquid diluent and form diluent vapor;

removing at least a portion of the diluent vapor from the flash vessel to form a concentrated slurry;

passing the concentrated slurry from the flash vessel to a transfer vessel; measuring a level of polymer particles within the flash vessel;

continuously withdrawing an amount of polymer particles from the transfer vessel and passing the amount of polymer particles from the transfer vessel to a purge vessel, the amount adapted to maintain the level of polymer particles within the flash vessel at a predetermined level;

separating remaining diluent from the polymer particles within the purge vessel; and

recovering the polymer particles from the purge vessel.

- 35. (Previously Presented) The method of claim 34 further comprising passing a nitrogen containing gas through the purge vessel to remove accumulated liquid from the polymer slurry in the purge vessel.
- 36. (Previously Presented) The method of claim 34, wherein the predetermined level of polymer particles seals the flash vessel from the purge vessel.

- 37. (Previously Presented) The method of claim 34, wherein the polymer particles comprise an olefin polymer.
- 38. (Currently Amended) A system for the recovery of a polymer from a polymerization reactor comprising:
- a polymerization <u>loop</u> reactor adapted to contact an olefin monomer with a catalyst system to form an olefin polymer within a polymer slurry <u>and comprising a settling leg</u>;
- a flash vessel operably connected to the <u>settling leg of the</u> polymerization reactor and adapted to receive the polymer slurry and vaporize at least a portion of diluent from the polymer slurry;
 - a purge vessel adapted to separate remaining diluent from the polymer slurry;
 - a transfer vessel disposed between the flash vessel and the purge vessel;
 - a first valve disposed between the flash vessel and the transfer vessel; and
- a second valve disposed between the transfer vessel and the purge vessel, the first and second valves adapted to maintain a predetermined level of polymer slurry within the purge vessel.
- 39. (Previously Presented) The system of claim 38 further comprising a control system operably connected to the first valve and the second valve and adapted to communicate with the same.
- 40. (Previously Presented) The system of claim 39, wherein the control system is adapted to measure a level of polymer slurry within the transfer vessel.

REMARKS

This is intended as a full and complete response to the Office Action dated January 16, 2009, having a shortened statutory period for response set to expire on April 16, 2009. Applicants respectfully request entry and consideration of the above noted amendments and the following remarks in response to the Office Action.

CLAIM REJECTIONS:

Claims 34-40 stand rejected under 35 U.S.C. §112, first paragraph. Applicants have amended features of the pending claims to reflect teachings of the specification and respectfully request withdrawal of the rejection.

Having addressed all issues set out in the Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request the same.

Respectfully submitte

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